

AMENDMENTS

IN THE CLAIMS:

*Please amend claim 18 as provided below:*

1. (Previously presented) A circuit arrangement for transmitting and receiving radio signals, comprising:

an amplification device including an output terminal for transmitting signals, and a supply terminal; and

an antenna for transmitting and receiving signals, the antenna connected to the output of the amplification device;

wherein a signal received by the antenna is provided to the output terminal of the amplification device, and wherein the amplification device is configured to convert the signal into a converted signal and provide the converted signal to the supply terminal of the amplification device.

2. (Original) The circuit arrangement of Claim 1, wherein the amplification device includes a supercritical power amplifier in a C-E mode of operation.

3. (Previously presented) The circuit arrangement of Claim 2, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

4. (Original) The circuit arrangement of Claim 2, wherein the converted signal is a modulated supply current.

5. (Previously presented) The circuit arrangement of Claim 4, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

6. (Previously presented) The circuit arrangement of Claim 2, wherein the converted signal is a modulated voltage drop on the supply terminal.

7. (Previously presented) The circuit arrangement of Claim 6, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

8. (Original) The circuit arrangement of Claim 1, wherein the converted signal is a modulated supply current.

9. (Previously presented) The circuit arrangement of Claim 8, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

10. (Previously presented) The circuit arrangement of Claim 1, wherein the converted signal is a modulated voltage drop on the supply terminal.

11. (Previously presented) The circuit arrangement of Claim 10, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

12. (Previously presented) The circuit arrangement of Claim 1, including a device coupled to the supply terminal configured to detect and demodulate the converted signal.

13. (Previously presented) The circuit arrangement of Claim 1, wherein a transmission rate associated with signals transmitted by the amplification device is different than a reception rate associated with signals received by the amplification device.

14. (Original) The circuit arrangement of Claim 1, provided as a transceiver of FSK-modulated data.

15. (Original) The circuit arrangement of Claim 1, wherein the amplification device is for transmitting an outgoing signal via the antenna to an object whose reflection behavior changes over time, and wherein the amplification device is further for monitoring the converted signal during said transmission of the outgoing signal to detect a change in the object over time.

16. (Original) The circuit arrangement of Claim 1, wherein the amplification device is for transmitting an outgoing signal via the antenna into a spatially limited area, and wherein the amplification device is further for monitoring the converted signal during said transmission of the outgoing signal to detect a change within the area over time.

17. (Original) The circuit arrangement of Claim 1, operable for transmitting and receiving radio signals nonsimultaneously.

18. (Currently Amended) A method for frequency conversion in an amplification device having a supply terminal for a supply current, a signal input terminal and a signal output terminal, the amplification device comprising a portion of a circuit, the circuit configured to transmit and receive radio signals in a substantially concurrent manner, comprising:

applying a first signal to the signal input terminal of the amplification device with nondiminishing amplitude, wherein the first signal is a transmission signal of the amplification device;

applying a second signal to the signal output terminal of the amplification device, wherein the second signal is a signal received by the amplification device; and

converting the second signal applied at the signal output terminal into a

converted signal comprising a supply current on the supply terminal via the amplification device, wherein the amplification device is operating in a supercritical range.

19. (Original) The method of Claim 18, including monitoring the supply current over time to detect movement in a 3-dimensional area.

20. (Original) The method of Claim 18, including monitoring the supply current over time to detect a change in an object over time.

21. (Previously presented) The method of Claim 18, wherein converting the second signal into the supply current further comprises converting the second signal into a modulation of the supply current.

22. (Previously presented) A transceiver arrangement comprising:  
an amplifier comprising an output terminal and a supply terminal, the supply terminal configured to receive a supply voltage;  
an antenna configured to transmit and receive signals, wherein the antenna is connected to the output terminal of the amplifier; and  
a demodulator with an input terminal configured to demodulate a signal provided at the input terminal, wherein the input terminal of the demodulator is coupled to the supply terminal of the amplifier, wherein the amplifier is configured to convert a signal received at the antenna and passed thereto via the amplifier output terminal, and provide the converted signal as a supply signal at the supply terminal of the amplifier.

23. (Previously presented) The transceiver arrangement of claim 22, further comprising a filter configured to suppress a DC-portion of the converted signal, wherein the filter is arranged between the input terminal of the demodulator and the supply terminal of the amplifier.